

VERSATILE SYSTEM FOR DIFFUSION LIMITING VOID FORMATION

ABSTRACT OF THE DISCLOSURE

Disclosed is apparatus and method for decreasing diffusive damage
5 effects to a primary structure (406, 506) within a semiconductor device
(400, 500). The device typically comprises a first interconnect (402,
502), and a second interconnect (404, 504). The primary structure is
disposed between the first and second interconnects to electrically
intercouple them. An active diffusion volume (410, 514) is determined,
10 within which the primary structure is located. A buffer structure (408,
508) is disposed upon the first interconnect in proximity to the primary
structure and adapted to buffer the primary via structure from diffusive
voiding occurring at a contact point between the primary structure and
the first interconnect.